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O'Hora

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(54) **PORTABLE AND MODULAR ENERGY STORAGE FOR MULTIPLE APPLICATIONS AND ELECTRIC VEHICLES**

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(57) **ABSTRACT**

A removable modular battery pack may include a first housing having a volume of at least 0.125 cubic feet, and a plurality of battery cells providing at least 1 kW of power. The modular battery pack may also include a processing system that aggregates power from the plurality of battery cells, and a first interface that communicates a status of the modular battery pack to a second housing. The modular battery pack may further include a second interface that transmits the aggregated power to the second housing, and a thermal material enclosed in the first housing. The thermal material may be arranged in the housing adjacent to the plurality of battery cells to transfer heat away from the plurality of battery cells and to transfer the heat to the second housing.

17 Claims, 16 Drawing Sheets

